

UNITED STATES GOVERNMENT

Memorandum

TO : SD, Idaho

FROM : District Manager, Burley District Office

SUBJECT: "Hudspeths Cutoff-southeastern Idaho"

DATE: September 8, 1969

Enclosed is a copy of the completed report of Dr. Howard R. Cramer, whom we have employed for the past month. The report is a consolidation of several summers of research which Dr. Cramer has pursued on his own and in cooperation with the Idaho Historical Society and others. The collection of diaries for the Hudspeth cutoff has been particularly time consuming and duplication of a composite diary for the remaining immigrant routes in Cassia County will require considerably more time than has been the case for this report.

As I view the overland routes of the migrations of the 1840's and 1850's and later, there were basically two funnels. One was South Pass in Wyoming and the other was in Cassia County, Idaho. Cassia County was the place where the final decision for Oregon or California was made. The Cassia County funnel was dictated by the physical barriers of the Snake River on the north and the Great Salt Lake Desert on the south.

The subject report covers only the Hudspeth cutoff which was established as a short cut to California in the 1849 rush to California. Other significant trails in this area include the Main Oregon Trail which traverses the south side of the Snake River; Lander Trail, established in 1857 as a more desirable route from Big Piney, Wyoming, to Ft. Hall; California Trail which left the Oregon Trail at Raft River; Salt Lake-Oregon Trail which came from Nef down Raft River to Malta - through Albion and west to Murtaugh; Salt Lake-California Trail which came through Nef westerly to join the main California Trail south of the City of Rocks. Virtually all travelers through South Pass eventually found their way over one of these routes in Cassia County.

I strongly urge that a way be found to identify and protect the remnants of these trails that remain on public land today. Probably the most effective means would be a program similar to the one for the Lander Trail which was followed by BLM and USFS in Wyoming and the Caribou National Forest in Idaho.

Dr. Cramer has mailed copies of the subject report to:

Idaho Historical Society (Dr. Merla Wells)
Coolin Sweeton (Ongida County Clerk)
Fencroft Library (Berkeley, California)

RESOURCE PROGRAM MANAGEMENT

SEP 9 1969

CHIEF	WLDP	REC'D	
RANGE	FOR	PROT	FILE



Yale University Library
Library of Congress
Library, U. S. Geological Survey

I am mailing a copy to the Supervisor of the Sawtooth National Forest.

John Bruce

Enc. 1

BLM LIBRARY
RS 150A BLDG. 50
DENVER FEDERAL CENTER
P.O. BOX 25047
DENVER, CO 80225

HUDSPETH'S CUTOFF
southeastern Idaho,
a map and composite diary

by

Howard Ross Cramer

Emory University
Atlanta, Georgia

prepared for
U. S. Bureau of Land Management
Burley District
H. Max Bruce, District Manager

Burley, Idaho
September 1969

ABSTRACT

Geological, biological, and topographic data from 44 diaries, dating from 1849 to 1859, of travellers over Hudspeth's Cutoff in southeastern Idaho were examined. A composite diary is prepared from the most descriptive portions of each from which mile-to-the-inch maps were prepared showing the route in detail. Old aerial photographs and original surveys of the 19th Century were also used, and a field examination was made.

The route leaves Soda Springs, traverses westward and southward across 6 mountain ranges and intervening valleys and joins the original California wagon trail along Cassia Creek, west of Malta, Idaho.

The observations of the travellers, while often not technically correctly explained, are useful in locating the original road.

TABLE OF CONTENTS

Introduction.....	iv
Index map, Hudspeth's Cutoff, southeastern Idaho	1
Township maps, Soda Springs to Malta, Idaho	2
Composite diary of Hudspeth's Cutoff, 1849-1859	20
Diarists' descriptions of special features along Hudspeth's Cutoff	41
References cited	52

INTRODUCTION

On July 19, 1849, Benoni Morgan Hudspeth, from Missouri, with 70 wagons and about 250 persons, instead of going to California via the usual route of the times, from Soda Springs, Idaho to Fort Hall, along the Snake River, and up the Raft River, departed from it and continued essentially straight westward, and a little south, from Soda Springs, and fused again with the main road at Cassia Creek, near present day Malta, Idaho. He completed his cutoff in six days, arriving at the Raft River on July 24, 1849.

His route, designed to establish a quicker route to the California gold fields, was adopted by many of the travellers who followed him so that it eventually became the main road to California for those who did not go via Salt Lake City, to the south. The Fort Hall-Snake River-Raft River leg of the route was essentially abandoned.

The cutoff remained in active use for about ten years, after which time the original route to California along the Snake River was re-established by F. W. Lender who, in the employ of the Department of the Interior, was commissioned to prepare a more practical route to California for immigrants.

The main geographic aspects of the cutoff have always been recognized by those who were interested, but heretofore, no map has appeared showing the detailed route on modern coordinates. This report does so, on the latest professionally-prepared maps where available, at a scale of one inch to about a mile.

The published and unpublished diaries of 57 travellers on the cutoff have been examined, as have six published road guides for immigrants, the road maps of the day. These were dissected and arranged synoptically by geography, after which it was possible to prepare a composite diary, extracting those portions from each which were the best geographic, topographic, geologic, or biologic descriptions.

Also used in this study were photocopies of the original land surveys of the townships which encompass the route, most of which date from the late 19th Century. Many of these original surveys will show a road in a given place, and sometimes the diarists' accounts will establish that this may be the road, having simply been utilized by the settlers who arrived a few years later.

In a few instances, the original road is labelled on the old plats, but generally by the name "old Sublette road", or some such identification. This error has stealthily crept into the local history and remains to this day. The old Sublette road is in Wyoming.

In addition, aerial photographs of the region, dated 1940 and 1941, were useful in detecting the actual or possible trace of the route, as it was still to be seen in some of the landscape before the advent of deep plowing.

Field examination of the entire route was also undertaken, with a view toward seeing the route first hand to enable the making of decisions regarding diary interpretation which would otherwise be obscure.

In general, the actual trace of the road, sometimes still in use, and often abandoned and severely washed and rutted, still remains in the mountainous areas where agriculture has not yet invaded. In the lower areas, the road trace is not usually preserved except in a few isolated places, as plowing has removed all vestiges of it. In populated areas, later road building has, for the most part, obliterated the original road, or added other roads to the countryside, making decisions impossible.

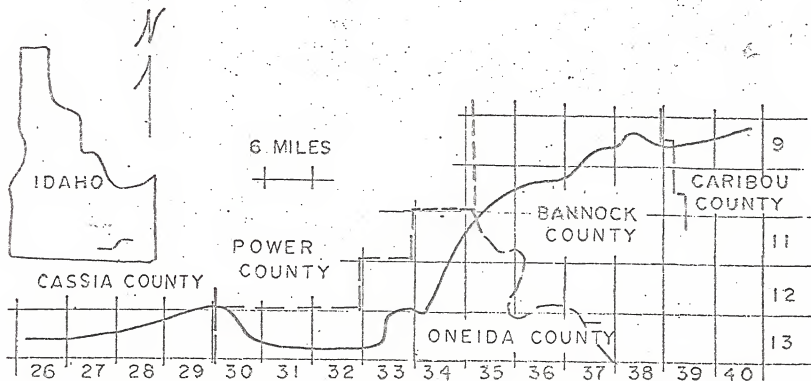
The accompanying maps show this variation in levels of confidence as definite (where the trace is still present), probable (where the original surveys show the road or where geography dictates the route, such as in canyons), and possible (where only diary accounts are available).

This work is the result of several years of sporadic research in the library at Emory University in Atlanta, Georgia, and in the field with Dr. Merle Wells, Idaho State Historian, and with Mr. Colin Sweeton, Jr., County Clerk of Oneida County, Idaho, and of six weeks of concentrated full time research made possible by the U. S. Bureau of Land Management.

This pleasant task was facilitated by the patience and cooperation of the staff of the Bureau of Land Management, Burley District, to whom I am indebted.

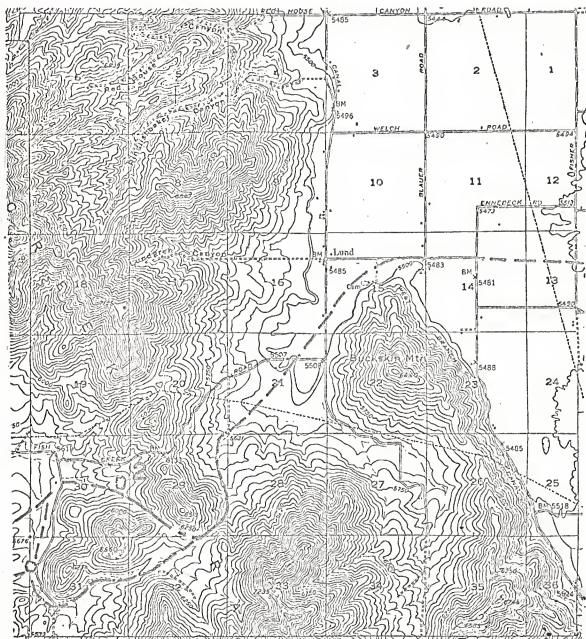
INDEX MAP

TOWNSHIPS SOUTH, RANGES EAST



TRACE PRESENT
ROUTE PROBABLE
ROUTE POSSIBLE
SPRING NOTED BY DIARIST
FEATURE NOTED BY DIARIST

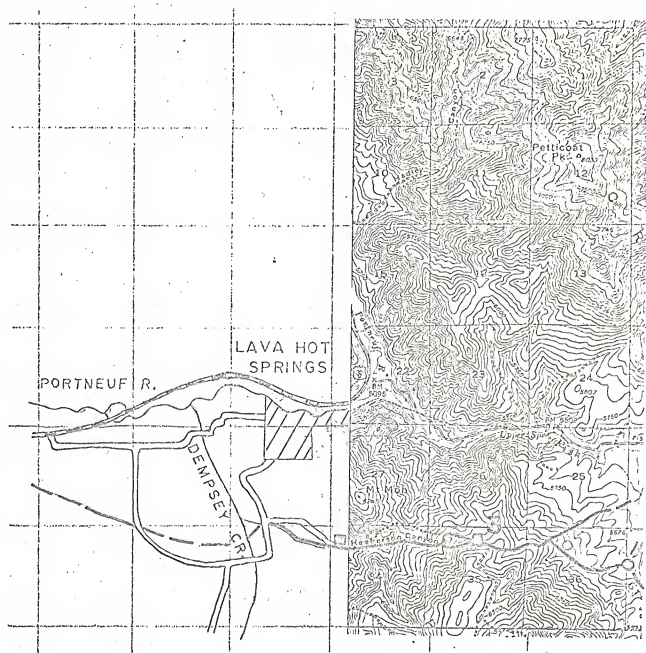
TOWNSHIP 9 S, RANGE 39 E BANNOCK-CARIBOU COUNTIES



HUDSPETH'S CUTOFF

- TRACE PRESENT
- ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

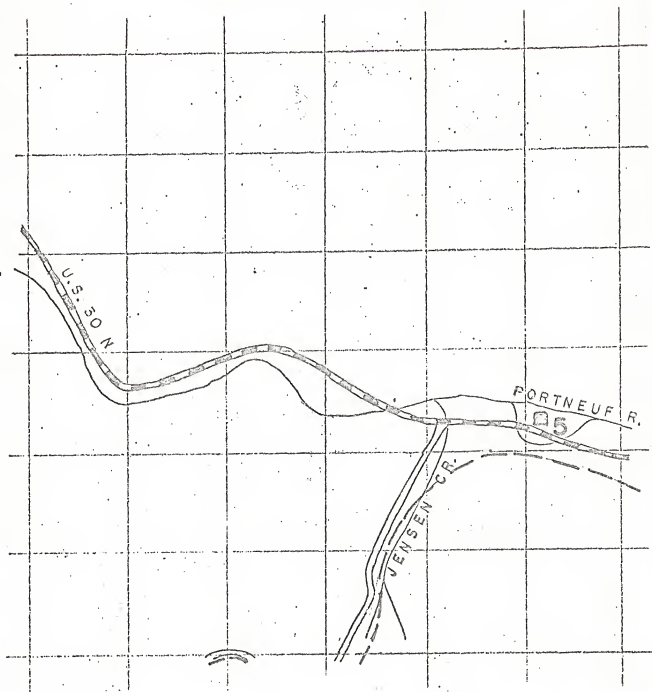
TOWNSHIP 9 S, RANGE 38 E BANNOCK COUNTY



HUDSPETH'S CUTOFF

- TRACE PRESENT
- ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

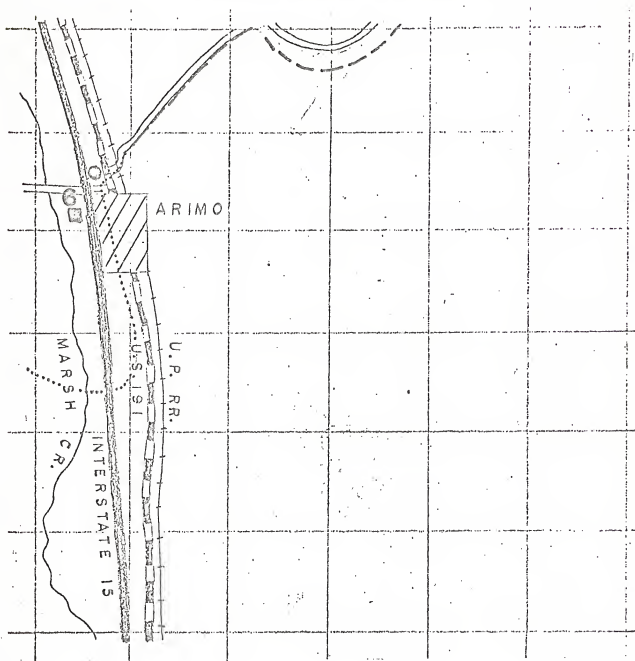
TOWNSHIP 9 S, RANGE 37 E
BANNOCK COUNTY



HUDSPETH'S CUTOFF

- TRACE PRESENT
- - - ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

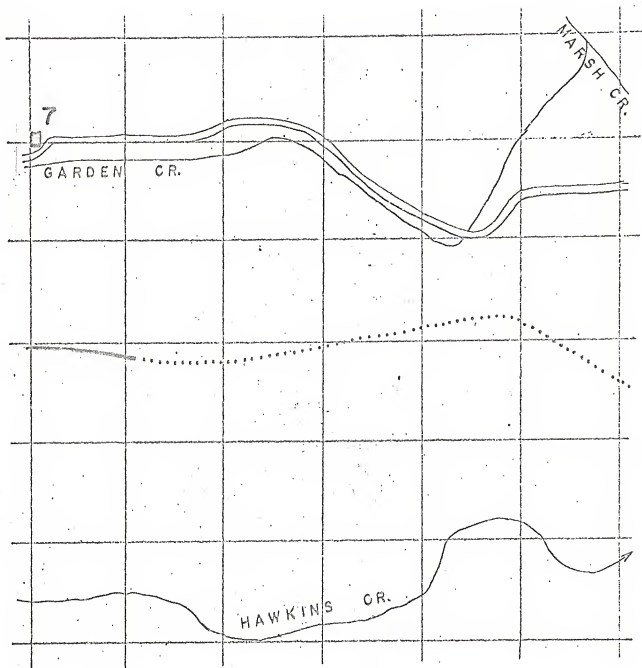
TOWNSHIP 10 S, RANGE 37 E
BANNOCK COUNTY



HUDSPETH'S CUTOFF

- TRACE PRESENT
- - - ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

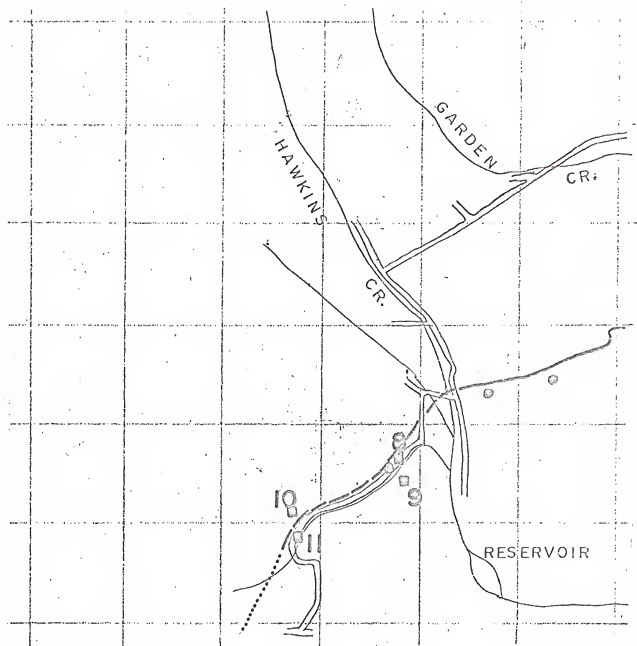
TOWNSHIP 10 S, RANGE 36 E
BANNOCK COUNTY



HUDSPETH'S CUTOFF

- TRACE PRESENT
- ROUTE PROBABLE
- ... ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

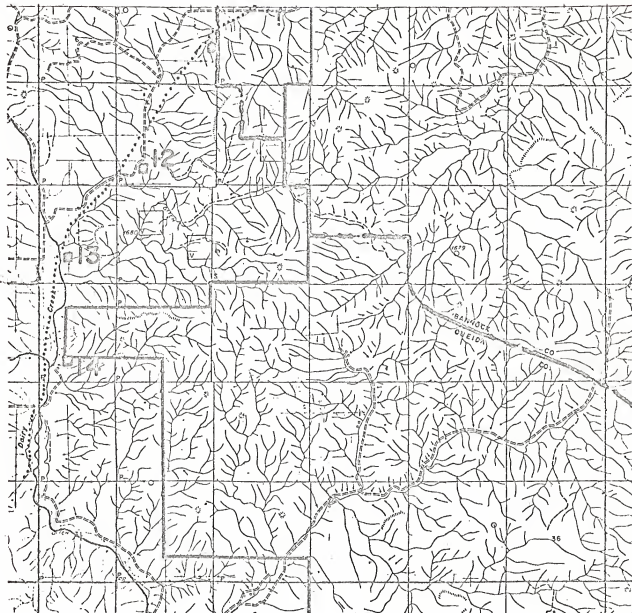
TOWNSHIP 10 S, RANGE 35 E
BANNOCK COUNTY



HUDSPETH'S CUTOFF

- TRACE PRESENT
- - - ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST.

TOWNSHIP 11 S, RANGE 35 E ONEIDA-BANNOCK COUNTIES



HUDSPETH'S CUTOFF

- TRACE PRESENT
- - - ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

TOWNSHIP 11 S, RANGE 34 E ONEIDA-POWER COUNTIES



HUDSPETH'S CUTOFF

- TRACE PRESENT
- - - ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

TOWNSHIP 12 S, RANGE 34 E
ONEIDA COUNTY



HUDSPETH'S CUTOFF

- TRACE PRESENT
- - - ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

TOWNSHIP 13 S, RANGE 33 E ONEIDA COUNTY



HUDSPETH'S CUTOFF

- TRACE PRESENT
- - - ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

TOWNSHIP 13 S, RANGE 32 E
ONEIDA COUNTY



HUDSPETH'S CUTOFF

- TRACE PRESENT
- - - ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

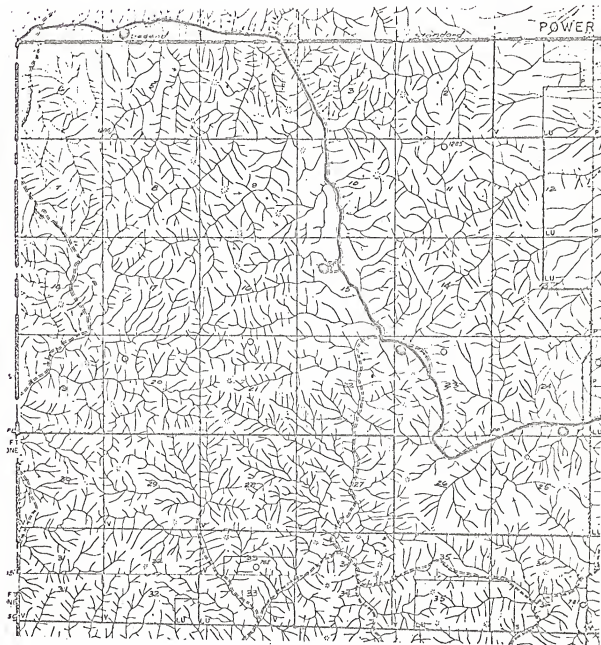
TOWNSHIP 13 S, RANGE 31 E ONEIDA COUNTY



HUDSPETH'S CUTOFF

- TRACE PRESENT
- - - ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

TOWNSHIP 13 S, RANGE 30 E
ONEIDA COUNTY



HUDSPETH'S CUTOFF

- TRACE PRESENT
- - - ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

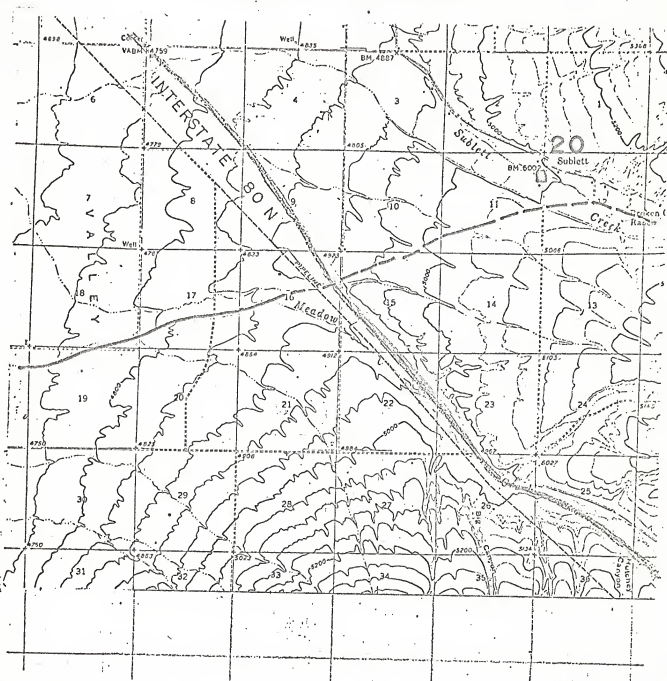
TOWNSHIP 13 S, RANGE 29 E
CASSIA COUNTY



HUDSPETH'S CUTOFF

- TRACE PRESENT
- - - ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

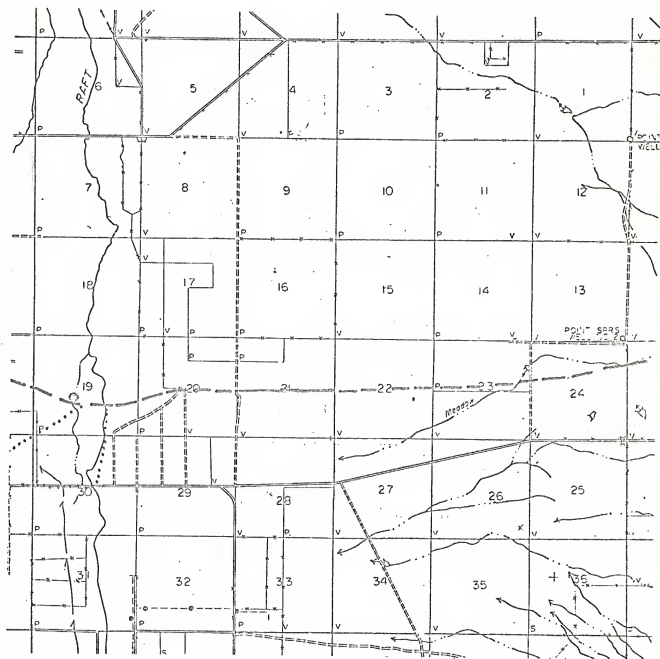
TOWNSHIP 13 S, RANGE 28 E CASSIA COUNTY



HUDSPETH'S CUTOFF

- TRACE PRESENT
- ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

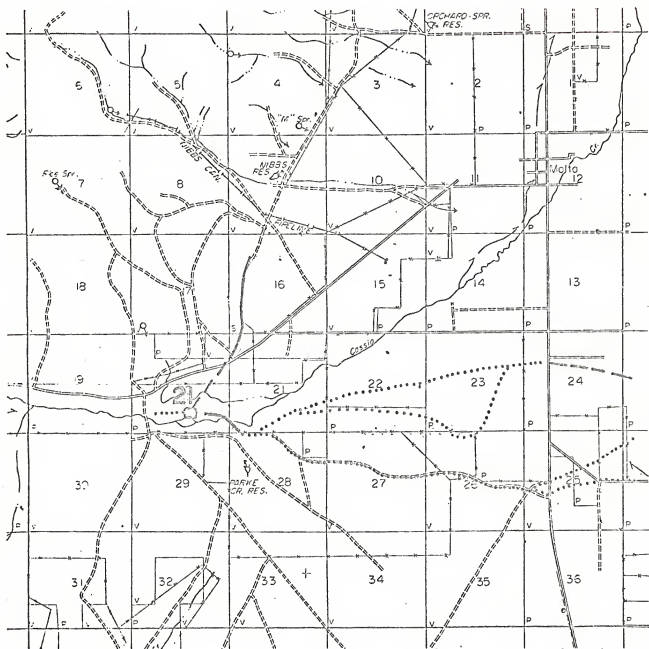
TOWNSHIP 13 S, RANGE 27 E CASSIA COUNTY



HUDSPETH'S CUTOFF

- TRACE PRESENT
- - - ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

TOWNSHIP 13 S, RANGE 26 E CASSIA COUNTY



HUDSPETH'S CUTOFF

- TRACE PRESENT
- - - ROUTE PROBABLE
- ROUTE POSSIBLE
- SPRING NOTED BY DIARIST
- FEATURE NOTED BY DIARIST

COMPOSITE DIARY OF HUDSPETH'S CUTOFF

1849-1859

Four miles from Steamboat Springs [now flooded by the Soda Point reservoir] we came to old crater and the junction of the Fort Hall road and Hudspeth's Cutoff. At this point, Bear River which has run nearly north for 150 miles or more, bends short round the mountain and runs back nearly parallel with its former course. The Fort Hall road runs to the right and runs along under the bluff, and Hudspeth's Cutoff continues nearly straight ahead towards the opposite mountains. (Sawyer)

Hudspeth left, four weeks since, with a train of 47 wagons, taking this route, and most of the trains have followed. If they could not get through, some would have returned before this. (Lord)

We arose this morning with a full determination of going to Oregon, but when we reached the junction of the road, the team stopped. Part of us, after everything was taken into consideration, concluded to try our fortunes in California; the remainder gave in and we concluded to let the oxen decide our destiny. We started them and awaited the issue with great anxiety; they turned to the left, leaving the Oregon road to the right. (Hayden)

There is a kind of basin here, surrounded by high mountains. It is some 8 miles across in the direction of Hudspeth's Cutoff and still farther north and south in the direction of Bear River valley. (Sawyer)

There is something singular about the face of nature about the forks of the road. (Pigman)

The earth, as if weary with her burden, has sunk in hundreds of places, some deep basins, others chasms. (Banks)

The whole earth shows the effects of earthquakes. The rocks are thrown out of the earth in all confused forms imaginable, filling the earth with caverns and holes, rendering it dangerous to travel for either man or beast. The rolling of our wagons over the road produces a roar that sounded as though the earth was not two feet deep. (Pigman)

I found the surface of the plain elevated, depressed, torn in fissures from violent volcanic action. The elevations were generally from north to south [and rose?] in height from 3 to 5 feet... Along the top, fissures [were filled?] with earth... the basalt has the appearance of having broken and fell over either way. The depressions had the appearance of having fallen from the surface of the moon, having broken masses of rock on their banks which lay as bare masses from the surface of that [plain?] to the level of the depression, having the appearance of having fallen from above in a broken mass. The fissures run in the same line. Some were 6 feet across at the surface... (Swain)

After a slight descent, the road passes over interval land between mountains. The road is excellent...(Childs)

The plain underneath seems to be one vast bed of rock lightly covered with soil. (Gorgas)

There are many smaller craters along the road for several miles, with deep cavities and crevasses...(Sawyer)

One or two extinguished volcanoes are yet visible...(Banks)

Most of the road was level until we came to the divide between the waters of the Columbia and those of the Great Basin. (Hickman)

The grass along the road for ten miles after leaving the [Bear] river is as good as I have seen on the whole route. (Bennett)

We failed to find water as expected...so we kept up a long hollow, many searching the hillsides in search of springs...(Howell)

Entered a pass one mile wide between a very high sloping hill covered with grass on the left [Buckskin Mountain], and a number of high peaks covered with cedars on the right [Fish Creek Range], fourteen and one half miles from camp [at Steamboat Springs]. The road next turns southwest, gradually and sometimes rapidly rising by a very smooth way four miles to the summit. (Lord)

Upon reaching the summit of this depression we found ourselves in a basin of the mountains about half a mile in diameter, surrounded by still loftier peaks covered with snow. These peaks apparently run up to sharp points. There were small aspen trees along the valley as we ascended and a species of dwarf cedar towards the summit of the mountains (Sawyer)

About three miles from the entrance to the mountains THE ROAD FORKS
(Child)

NORTH ALTERNATE ROUTE

Here the road turns northwest half a mile...(Lord)

Ate a quantity of service berries which grow along the road in great abundance. These berries are quite ripe [August 18, 1849] and very delicious. They are the size of and vary like the black grape. They grow upon bushes from 2 to 10 feet high and are [covered?] with grasshoppers [and?] dust. (Austin)

From this point we descended into another basin surrounded by high and sharp peaks similar to those just mentioned...(Sawyer)

We arrived at a fine stream of water [Fish Creek] which had its rise in a spring half a mile above our camp. The basin from which it issues is about 10 feet in diameter and a body of water of considerable size here first sees the light...(Perkins)

Fine grass is on the surrounding hills. (Brown)

Willows and aspen poplar are the wood. (Burbank)

Never saw the like of grasshoppers. (Dalton)

Plenty of mosquitos-almost impossible to write for them. (Wagner)

I ascended an adjoining hill...and found a plant [much resembling arbor?] vitae, but not so [illegible] as that which we have at home. (Middleton)

I saw a dwarf shrub [something?] like boxwood which [is used at home for?] walk borders. [I could not?] ascertain whether it was an evergreen. (Middleton)

About two miles above the main road the creek can be forded. A road leads to it from the descent into the valley. (Marcy)

Crossing the brook...the road began to ascend the dividing ridge... (Perkins)

The road thus far upon the mountains is good and continues so for one mile further. Then it passes through a WET GULLY between the hills and for half a mile is very bad...(Child)

SMALL SPRING one mile [from Fish Creek]...(Steele, guidebook)

SOUTH ALTERNATE ROUTE

Instead of turning to the right we descended one and a half miles down a ravine of easy descent and camped at a small spring, one of the heads of the stream just spoken of [Fish Creek]. This is the first water after leaving the bend of Bear River. (Lord)

After travelling a mile and a half farther you come to a LARGE, RAPID STREAM [Fish Creek]...then it passes through a WET GULLY... By turning short to the left, upon a new track [1850], and ascending a steep bluff, much of the worst of it can be avoided. (Child)

END OF ALTERNATE ROUTES

The ascent was long and tedious. (Sawyer)

We turned the ridge...and found a smaller stream running down the mountain side into a basin. (Perkins)

I found the mountain laurel growing here. (Middleton)

The small stream runs west...Beyond the creek ahead [Dempsey] I see the road winding northwest along an uneven valley bordered with high hills in the distance. (Middleton)

From this point we descended a long, steep, rough, and difficult hill [Henderson Canyon]. We descended by a ravine down which runs a small stream. The road follows down the narrow bed of a stream; many places are sideling and difficult to pass. (Sawyer)

Frightful to look at on account of sideling places, rocks, and deep holes guttered out by wheels and runways from springs...(Turnbull)

Sometimes climbing hill sides to avoid deep ruts worn by a rivulet having its source midway up the mountain...(Bennett)

Descended the chasm to a point 3 miles below where it ran around the base of a high peak and emptied into a larger one. (Swain)

[This is the] worst road we have yet met with; hillsides, bed of creek, and a very steep hill, all of which required great care...(Shepherd)

We got down without accident though I can scarcely tell how...(Sawyer)

I heard the buzz of a rattlesnake...he was as large round as my arm and had 13 rattles...another...larger but, with only 10 rattles. (Perkins)

[While climbing in the mountains] I found some fine June cherries which grow on bushes not to exceed 11 feet in height and larger than those at home...we passed through a forest of juniper. (Swain)

Snowberries, and what are called service berries grow in great plenty along the side of the mountains. The snowberry is about the size of our whortleberry; it has a very sweet mucilaginous taste and is much used for food by the Indians...(Batchelder)

I saw one badger. Strawberries are in abundance. I saw plenty of what we call in Ohio June berries, but they was not ripe [July 21, 1849]. Cedar wood in abundance. (Granville Company)

Have arrived at the creek [Dempsey Creek] in the valley...[it flows?] over a clear gravelly bottom...it comes out of the hills to the south and below the ford it pursues a northwest course. I expect to meet with it again [after?] it has married its mate which I think comes from the east [Portneuf River]. (Middleton)

Here we had an abundance of grass, wood and water. (Bennett)

Alder grows on its banks. (Burbank)

An abundance of mountain trout in it. (Hoffman)

We now crossed a fine large creek supposed to be a branch of the Port Neuf, an affluent of the Lewis [Snake] River which is in itself a main branch of the Columbia. (Sawyer)

I left the train and went down the river something like 12 miles. There is more scenery along this river [Portneuf River] than I have ever seen. There was quite a number of falls along the river. Some of them had a fall of 30 feet perpendicular. (Hickman)

After ascending the bluffs (first crossing the river [Dempsey Creek]) the road runs in sight of the [Portneuf] river. (Child)

The road then lies [along the] slope of foot hills of a high ridge to the left. Porte Neuf [Portneuf River] one half mile to the right. (Wagner)

Passed close to an elbow of it to the right...(Shepherd)

For several miles we encountered myriads of large black crickets; the ground was literally covered with them and every particle of vegetation had been devoured. At times they came in clouds, whizzing through the air like a hail storm. (Steele)

Camped at the right of the road a short distance from a ...(Sawyer)

Fine stream 20 feet wide, deep and clear. (Burbank)

Near a splendid mill seat. (Wilkins)

There are plenty of trout in it but they would not bite. (Shepherd)

This is a large deep stream and appears to split or divide, running round a hill in the middle of the valley, to join again on the west side of the hill and form a considerable falls with a goodly noise over rock of the same porous dark blue character we travelled over at the volcanic chasm yesterday, about 20 miles back from here. Rock of this baked porous character [basalt] line the banks of the river below "Island Hill". (Middleton)

Current bushes, wild roses, willow, principally birch, and arbor vitae, or rather something between the last and cedar, grows on the hill island. (Middleton)

Birch grows here. Willow is plenty, and some of the largest rushes I have ever seen. The wild currant bush is abundant, and grow in thickets 7 or 8 feet high and as large as any Irishman could desire for a heavy straight shelallah. (Middleton)

Since we struck Bear River we have seen a few huckleberry bushes, sugar tree shrubs, wild beans, and one or two varieties of phlox--great country this for a lazy botanist. (Patterson)

Copperheads and rattlesnakes are numerous. (Sedgely)

Just below here is a thick grove of willows and the water spreads out for a hundred yards and takes a leap down the rocks forming a cascade, the roaring of which may be heard for two miles distant. (Bennett)

We are in a lovely valley, seemingly shut up on every hand by an impenetrable barrier of mountains. (Patterson)

I must cut today's note short, as it takes both hands to keep off the mosquitos. (Smith)

Followed down the creek a short distance. (Carpenter)

The road does not cross this but turns left (Steele)

Here the road leaves the creek. (Bennett)

And took to the mountains again. (Carpenter)

Our road led into a valley. (Pigman)

Had a good road through hilly country. (Farnham)

The valleys are broader and there is an evident improvement in the appearance of the soil. (Batchelder)

We ascended a long slope. (Wayman)

Travelled up an undulating valley [Jensen Creek] (Patterson)

The ascent was easy and gradual. (McCoy)

To the red, ashy summit of a mountain. So visible appeared the action of heat, and so destitute of all vegetation, it seemed but yesterday to have emerged from the earth's flaming center. (Steele)

Descended by a long steep pitch into the valley of Marsh Creek. (Wagner)

The road was very good. No difficulty in passing. (Brown)

We saw some yellows, dock, elder, and blue bells for the first time since leaving the States [Aug. 1, 1849]. The soil has changed very much since the last two or three days. The soil is very good at this time. (Badman)

A spring lies to the right of the road and toward the stream [Marsh Creek] where the road comes down the valley. (Burbank)

We reached a large pond covered with a rank growth of bull rushes and a tall species of grass. There is a good spring here in the bank of the pond and a deep sluggish stream 20 feet wide running in a north course on the opposite side...(Bennett)

In a valley of luxuriant grass...(Burbank)

There is quite an expanse of bottomland. (Carpenter)

About two miles above the main road the creek can be forded; a road leads to it from the descent into the valley. (Narcy)

We continued on to the south for about two miles. (Bennett)

Camped that night on the margin of a bull rush swamp. (Howell)

Between the broad marshy meadow where our animals were turned out to feed, and the mountains which bound the valley, the soil is barren, but sufficiently fertile to produce a dense growth of wild sage with scarcely an appearance of any other vegetable production. (Batchelder)

Saw several new plants today. The service [berry]...the small swamp maple, the genuine little snow drop looking too pretty for this savage country, and plenty of large rose bushes without flowers. The sight of these familiar things was quite thrilling. (Perkins)

There was a great number of wild ducks and geese found here. Mr. Moore returned with a dozen ducks, principally blue-winged teal... our only fuel here is wild sage. (Bennett)

The oxen [are] feeding on a large growth of wild millet. (Steele)

We came to clear water, 2 rods wide, 30 inches deep, placid current, gravelly bottom--bad going in, good landing. (Gorgas)

The water of the stream is rather unpalatable owing to the dead grasses and rushes through which it passes. (Bennett)

The water of this creek is warm. (Hayden)

We followed down on the opposite side. (Shepherd)

Then over bluffs one mile. (Child)

This forenoon by an inclined plane of eight miles we ascended the mountain. (Steele)

The road across which is perceptible from the east side of the branch [Marsh Creek]. (Gorgas)

Ascended a long and very gradual slope and wound through a ravine to the summit of high cedar mountains. (Wagner)

Stopping occasionally to pick service berries which grow in great abundance along the side of the road. (Batchelder)

Some of the way was quite steep. (Lewis)

There are two classes of mountains in this region, the largest covered with snow [June 27, 1850] and the smaller ones having vegetation and filling up the space between the others. Upon the peaks of some of the highest mountains is a stunted growth of cedar which gives them a rather dark appearance. I have often heard when at home that buffalo did not abound west of the South Pass, but I have seen numerous evidences in the shape of skulls by the road; but it is said by the Indians that there are not at this time any buffalo in this region, nor has there been any for six years past. A sufficient cause for their entire disappearance in this region I cannot fully understand. (Smith)

On reaching the summit [between Marsh Creek and Hawkins Creek] we found the road descended immediately on the other side. (Sawyer)

Down a steep hollow among the hills which cannot be called green. I see the road from the hill. The road travels in a large hollow, not more than 1/4th the width of the last one we left and ascending the hill on the other side, disappearing between them, winding away to the southwest. (Middleton)

Bastard arbor vitae prevails on this hill top which is full of berries [Aug. 20, 1849] about the size of buckshot. Seed on the inside the size of two grains of buckwheat. (Middleton)

In less than one furlong after commencing the descent we came to an exquisite spring of water... (Middleton)

A little to the left of the road. (Bennett)

The first good water since leaving the [Portneuf River], 13 miles distant. Water here for men and horses. (Middleton)

Lamb caught us a fine mess of fish. (Hayden)

The cedars on these mountains are just like an old apple orchard that had been planted. (Turnbull)

This small spring runs down the valley and forms a small [stream?] of proven water half a mile distant, which runs south, in another quarter mile [it turns a?] small hill [and joins ?] another rather larger run in the valley [Hawkins Creek], then round the hill. This last creek runs southeast. (Middleton)

Half a mile from here is another small creek [a branch of Hawkins Creek]...both these streams run to the south and no doubt empty into the one we left this morning [Marsh Creek]...we met a company of traders here from Salt Lake and bound for Fort Hall by a blind trail leading to the right. The Salt Lake road enters the cutoff road 15 miles ahead. (Bennett)

The valley [Hawkins Basin] sends from the north part a small stream [Garden Creek] through the rocky canyon [Garden Creek Gap]...and the stream running south by the camp [Hawkins Creek or branch] winding round the hills south and east receiving small streamlets from the west and passes through the south depression [Hawkins Gap] and both run into the muddy stream [Marsh Creek]...(Lord)

After crossing the creek the road turns left. (Wagner)

In a short distance we came to a very steep short hill and then pass up the north side of a dry slew which runs to the [illegible]. (Middleton)

SMALL SPRING 1 mile [from Hawkins Creek]. This is on the left of the road in an aspen grove and is not a good place to camp. (Steele, guidebook)

Saw a mountain goat here in this valley...never have yet seen a [illegible] a black or grizzly bear. (Middleton)

[climbing a hill to the south of the slough] Saw near the top what I think is mountain laurel; ate bear berries off the trees, and at the moment of arrival at the summit was assailed by a swarm of flying ants as thick and fierce was the attack as I ever saw mosquitos, without exaggeration, but they did not bite or sting.. On the north side I saw several very small clumps of what I think was a very delicate boxwood such as is used for garden walk borders. (Middleton)

After ascending a ridge for two miles... (Bennett)

The road follows up a wide gorge in the mountain [to a] SPRING 4 miles [from Hawkins Creek]. (Steele, guidebook)

On the left of the road. (Child)

Wood for fuel of white cedar in great sufficiency close by. (Steck)

The road ran parallel with it for half a mile and then turned right, and passing between the mountain ranges...(Sedgely)

From the summit...the surface slopes gradually toward the southeast and widens into a broad basin. (Sawyer)

I saw two deer today. The wood today was cedar on the hills and willow in the valleys. (Granville Company)

The country is mountainous and broken but some parts has a good soil but will never admit of cultivation, the altitude being so great. (Lewis)

The lesser hills [are] green to their tops, valleys rich in vegetation, wild wheat, clover, and oats...(Ingalls)

The road was principally descending over a rolling country to a creek [Dairy Creek]. (Bennett)

For the last few miles back, flax has been growing very plentifully, like a thin sown crop choked up with weeds from bad husbandry. (Middleton)

Wild wheat and oats grow very luxuriently along the valleys and rivers. The head of the wild wheat does not fill, but the berry--if it can be so called--has much the appearance of chess. We also saw large quantities of wild flax. (Sawyer)

I counted one stalk or [illegible] of flax with 22 full grown stalks on it and the root was as large as a small radish nearly half an inch in diameter. I did not select it as the soil was poor. (Middleton)

We reached the headwaters of Roseaux or Reed Creek [Dairy Creek, a tributary of the Malad River] which runs south, showing us we are in the Great Basin. (Parke)

Our road has held a southwest course driving all this distance [from Hawkins Creek] and the last four miles has been rather level, the most of it downhill...The country does not possess the wild appearance that it had a piece back. The hills are not so crowded around, not so rocky, more smooth, rounded, and somewhat green, and at a great distance with more extensive plain-like valleys... The road is seen from a hill on the southwest side of this creek... slanting across the valley to the southwest leaving the creek to the southeast. (Middleton)

Two crossing within one fourth mile...travel near the creek for one mile and a half over a good road. (Child)

Two streams in a wide bottom [Dairy Creek and a tributary from the west]. (Gorgas)

Grass fine mixed with wild flax. (Parke)

The hills here are thickly covered with juniper bushes. (Farnham)

[Climbing a hill near Dairy Creek], on the northwest side of the hill near the top I saw what I conceived to be mountain laurel, some very fine boxwood in long clumps. About 50 or 60 feet from the top I got [illegible] large black-blue bear berries; they [are?] sweet and very juicy and were really [delicious?]. . . further up the mountain as well as further down the berries were, neither as large, so juicy, nor so sweet. (Middleton)

The road left the creek, came up on a small rise and then... (Thomasson)

We saw some wild wheat 6 or 7 feet high, and some wild sage. (Granville Company)

On a road which leads directly over hills on a remarkably level road for so hilly a country... (Swain)

Laying along a descending hollow between two mountains most of the way we arrived at Gravel Creek [Little Malad River]. (Wayman)

There were two tracks, one leading to the right [to a spring] and the other crossing the creek half a mile below the spring. (Dutton)

This creek runs from a large spring about 80 rods from the road. (Child)

This is the largest and finest spring yet seen on the road. (Dalton)

120 yards in circumference, it had a good gravel bottom. (Farnham)

It is about 1 foot deep, very clear, and covers about one fourth acre of ground. It supplies quite a large stream of water. (Batchelder)

There are large numbers of trout in the spring, but they are too shy to be caught. (Batchelder)

Summer berries are very plentiful along the route. They much resemble the sugar plum of New England, but are nearly as large as a good sized cherry. (Webster)

Wild tares in places three feet high. (Turnbull)

Service berries are still abundant on the mountains to the south. The bushes grow about 7 feet high and very much resemble the buckthorn. I think they would make a good hedge and perhaps a profitable one for the fruit. (Batchelder)

After crossing, the road bore southwest down the creek. (Dutton)

Travel within a half mile of the creek for a mile and a half. (Child)

The Salt Lake road takes down this valley and the cutoff bears more to the west over a range of mountains [Blue Spring Hills].
(Bennett)

Boaring up against the mountain side, rounded a long spur...(Steele)

The road, after leaving the clear stream, rises into the bluffs.
(Gorgas)

The road then passed over two long hills and turned to the right...
(Sedgely)

Where we entered a well defined hollow [Sublette Canyon] between hills that [closed?] in on both sides leaving only room enough on the bottom for a good road. It entered in a direction a little north of west and ascended slowly and gradually forming a large circle.
(Middleton)

We started on a hunt--we travelled about four miles and ascended high mountains. Here we found 3 antelope. We killed 2 and wounded the third. (Mitchell)

Saw a bear and two cubs this morning. (Wagner)

We saw no game but a fox. It is all driven away if there ever was any.
(Lord)

We rise a steep hill and reach the summit. (Sawyer)

On the summit there are a number of cedar trees. (Gorgas)

A quaking aspen grove where the trunks of the trees are scarred with thousands of names cut in the bark. (Patterson)

An anxious glance ahead revealed a small cedar grove far below the precipitous spur, which bore the mark of the trail. (Steele)

The road now descends through a deep narrow ravine on the other side-- long, steep, rough, tedious, and dangerous. This is decidedly the worst hill to descend we have yet found. Nearly the whole distance the passage is barely wide enough to admit a wagon, while the steep perpendicular rocks on each side often rise higher than the wagon box, utterly precluding all idea of upsetting at these points. The road is often sideling and stony; the descent is over a mile. We locked both wheels and fastened a rope around the axel to hold back by from behind. (Sawyer)

We expected to find water at the foot of the mountains but were disappointed. (Sedgely)

At the foot of the mountain the road crossed some low ridges sparsely timbered with cedar. (Steele)

The road then turns south round a considerable elevated hill [into Deep Creek valley]...one mile north of this turn the rim of the Great Basin crosses the valley, which is here four or five miles wide and extending north until it sinks out of sight, two thirds of the right side being occupied by the mountain in the distance. (Lord)

One of our company shot an antelope this morning and another a sage hen, so we will surprise our stomachs by giving them fresh meat. (Parke)

Wild flax abounds in this region though not in abundance. It is now in full bloom [June 28, 1850] and looks quite like a flower garden in some places. (Smith)

The Indians say there is a spring a half mile to the left of the road, opposite a cedar bluff, at the foot of the hill. (Patterson)

Descending to the plain [Deep Creek valley] and keeping the wagons widely apart to avoid the dust, we made fair progress. Nearing the edge of the plain we saw on the mountain side about three fourths of a mile to our left of our road, a green spot... (Steele)

Camp roads lead off to the left, and a mile distant from the road is an excellent spring of water [Pétit Spring]...(Child)

It ran but a short distance and sank into the dry ground. (Steele)

Half a mile above the spring is a fine run. (Child)

By damming up the rivulet we procured enough water for our cattle. (Bennett)

Our present encampment is surrounded by the finest bunch grass I ever saw and in great abundance. (Hoffman)

There is no water between this and the creek we left this morning [Little Malad River]. (Bennett)

This [spring] was discovered this year [1850] and formerly it was 20 [actually 22] miles [between waters]. (Dutton)

The track is now directly south six miles [from the descent into Deep Creek valley] in the low level valley bottom where it turns suddenly west and by a very gradual ascent in four miles reaches the summit of a very high hill [Deep Creek Range]. (Lord)

Here is a beautiful grove of timber. (Hayden)

We crossed some dusty ridges and passed down the dry bed of a water course [Bull Creek]... (Steele)

To a small green flat where two brooks united [Twin Springs]. (Steele)

And a small stream which comes in from the southwest [Big Rock Springs]. (Lord)

To avoid the dusty roads there are foot paths and these going through the sage and ravine bushes frequently run right across the mouth of a badger or wolverine hole...the badgers are very numerous and make their holes in settlements or villages like the prairie dog. The hole is from 9 to 12 inches in diameter running down perpendicularly 8 feet and then at an angle at the bottom. As they are very shy I have seen none alive but our train killed one answering the description of the badger given in Natural History. They are a powerful and rather savage animal and a more wolfish head or more formidable set of teeth cannot be found. (Perkins)

The mountains over which we have travelled the last two days are all rounded off mostly, and many of them are covered to the top with grass. Some have cedar on their tops. Most have groves of poplar in ravines and are sparsely covered with service berries, the first of which is ripening [Aug. 11, 1849]. They are much like the whortleberry, perhaps a little larger. We find acres and acres of rose bushes. I saw one double leafed rose 3 inches in diameter. (Lord)

North [are] high mountains, rough and timbered, east, a high bluff, south and east a broad plain and mountains in the distance, west gradually rises to rounded smooth grassy mountains. By my reckoning, the extreme northwest point of the Great Salt Lake is 20 miles south. I intend to see it tomorrow from some of those peaks west of us [Sublett Mountains]. (Lord)

The soil looks good and kindly, but the want of rain makes it a desert ...pasture moderately good all about at a little distance...and plenty of wild sage for fuel. (Middleton)

The country is less barren for the last few miles. We found large quantities of wild wheat in the valleys and an abundance of good grass all along the route...we found wild onions all along our route but the bulb does not appear to attain a sufficient size to give it any value as an article of food. We also saw wild parsnips and carrots. (Sawyer)

The road from the camp [at Twin Springs] is west up not much of a hill two and a half miles, making a detour northward around the head of a ravine and crossing to the north side of the rim of the Great Basin again. (Lord)

The road lies for 5 miles [from Twin Springs] over an undulating surface or rather a number of ridges, strikes the mouth of a canyon...(Wagner)

Passed over a valley covered with wild wheat as high as my shoulders. It was headed out and looked like a cultivated wheat field. (Ingalls)

The road enters a ravine between high mountains, narrow, but wider than yesterdays [Sublett Canyon in the Blue Spring Hills]. (Shepherd)

Shaded on either side by the whispering leaves of the quaking aspen. Here we saw ...footprints of a bear who had dragged an ox and tore off one ham...(Steele)

This defile is about two miles long but it is not so regularly confined in by a continuation of steep banks of high hills on each side as that of the Big Horn [his name for the ascent up Sublett Canyon in the Blue Spring Hills], more especially the end to the northwest. (Middleton)

In the expanded part of which we camped at the spring [Sublett Troughs Spring]...(Middleton)

Up a ravine a little to the left of the road. (Bennett)

All the water of this spring is absorbed in the bottom of the defile. (Middleton)

A little animal abounds in this region called the prairie squirrel. It is smaller than the common black squirrel, and gray in color. We see hundreds of them every day and they are often killed with clubs and whips. I first noticed them in the vicinity of Fort Laramie and have seen them every day since. (Smith)

One and a half miles farther, on the left of the road, there is a well (this I learned from the boys supplied but little water and is about four feet deep). Indications of water may be seen through the gorge on its southern side for two miles in the vicinity of the well and spring. A short distance from the well, west, you reach the rim of the [Great?] basin. [Actually the divide between Sublett Troughs Canyon and Pine Creek Canyon, a north-reaching tributary from the head of Meadow Creek]. (Lord)

Our wood was cottonwood and cedar. (Granville Company)

Passed through a long narrow and deep defile to a sudden bend in the road to the north. (Patterson)

Quaking ash trees are to be seen now and then on the face of the mountain. (Hayden)

Our chasm like ravine led us to the summit of the mountain--below yawned innumerable ravines and chasms, while far in the distance over a sea of cones and pinnacles, toward the west, a huge mountain raised its snowy dome in the sky. This I recognized as Pilot Peak, at the head of Raft River which had been described to me by the mountaineer Baker. [Independence Mountain in the Albion Range]. (Steele)

Near the summit, our animals were turned out to feed on the bunch grass growing among the rocks. This mountain range supports in many places a growth of timber. (Batchelder)

Where the road begins to descend, a large pine-shaded spring [Pine Springs] flows from beneath a rock. Following down a ravine similar to the one by which we ascended, passing several large aspen groves... (Steele)

Saw some goodly sized trees, either spruce or fir. (Ingalls)

Tolerably good grass. (Carpenter)

One mile [closer to a half mile] brought us to the crossing of the South Branch [of Raft River?]. [This is Pine Canyon, near its head]. (Hayden)

From here the road again ascends a few hundred feet or more, again crossing the rim of the [Great?] basin. [This is the summit between Pine and Summit Springs, not the rim of the Great Basin]. (Lord)

We finally emerged upon a hill overlooking a valley with fine grass and a creek of pure water [from Summit Springs] and bounded by high bluffs and mountains. (Perkins)

The height of the hills was left behind and the road began to descend a defile winding gradually among hills. We found two good springs [one of which was Summit Springs, the other Sublett Springs, farther ahead]. (Swain)

Passed several large aspen groves. (Steele)

In the gap of the mountains grandly curved, the traveller sees a grand amphitheater formed by a large mountain gracefully rising behind, at the foot of which stand 5 or 6 pine trees. (Banks)

I saw a fresh piece of paper on the roadside with the following written, "fresh bear marks on the road" (Middleton)

We went down the ravine, next came to a spring...the largest I ever saw for some time [Sublett Springs]. (Turnbull)

Flows out from the north side of a bluff nearly perpendicular several hundred feet high. (Dalton)

The spring comes out of the side of the hill from amidst rock and black, rich-looking earth. Currant bushes, wild rose bushes, and bastard cottonwood and willows grow here and I saw some pines on the hill sides on the left before I arrived here. (Middleton)

The ravine passed on the south yesterday and this morning has fir trees in considerable numbers and some of them large size, but back some distance from the road. (Lord)

A pack of hungry wolves have taken the scent [of a butchered ox] and are making the mountain forests and gorges echo with their dismal howlings. (Batchelder)

Good grass and above mountain ravines. (Burbank)

Half a mile from the spring is a very bad small muddy creek [North Fork of Sublett Creek] to cross. This trifling muddy creek enters the defile from the north and joins the little branch which comes from the spring [South Fork of Sublett Creek] and both run down the defile to the west. Three miles farther on down this ravine [we] cross a small brisk running creek [Lake Fork of Sublett Creek] with a black muddy bottom and sides, and on the other side at the foot of the hill is an excellent spring of pure water. [This junction is now flooded by the Sublett reservoir]. (Middleton)

This ravine, with whatever water it has gathered from the place where we nooned [Sublett Springs] still continues westward down which the road goes. (Middleton)

Some aspen groves along this branch. (Wayman)

I caught a fine lot of mountain trout. (Turnbull)

[This is the] handsomest road I ever saw. (Turnbull)

Here it [the road] turns SSW two and a half miles and WSW three and a half miles and crosses the main stream. The last three and a half miles runs through a broad handsome valley. The creek is still on the left side. The road, till it emerges from the ravine into the valley, crosses the extreme parts of several spurs only a few feet elevated and sometimes not more than one or two feet above the stream. Springs are numerous and the water good. (Lord)

Though the grass and water in this part of Oregon would seem to indicate game, we have seen none except sage hens and ground squirrels. (Banks)

Camped in a grassy valley of 50 or 60 acres and on a considerable stream. (Farnham)

We have been following down a stream for about 6 miles and it is sinking very fast as it is not as large now as when we struck it. (Badman)

Halted to noon on the creek which sinks half a mile below. (Swain)

The river runs west and we cross it in a southwest direction. (Middleton)

And ascended a gentle slope, the summit of which overlooked a descending plain, bearing only a small growth of sage. A long line of willows through the center of the plain marked the outline of a stream [Raft River]. (Steele)

A large valley lying between Salt Lake and Snake River lay between us and the mountains to the west...(Swain)

From here the road runs southwest six and a half miles on a higher level (Lord)

Over a deep loamy soil (very deep beds of dust) [loess]. (Burbank)

After getting a little way into this, everything assumed a most arid appearance. The cobblestones had a burnt appearance and the air was filled with clouds of white dust. (Farnham)

Valley overgrown with artemesia and little burry weeds. (Farnham)

The soil on the flat was very poor. Nothing is growing but wild sage and that has hard work to keep life up. (Granville Company)

This is the most infertile tract we had seen, nothing growing but wild sage and cactus. (Wilkins)

A large mountain on our left about three miles distance [Black Pine Range] overlooks the Salt Lake; it is some 30 or 40 miles; the plain over which we travelled is a desert. (Banks)

[The road then] descends to a lower level [Meadow Creek wash] covered with weeds and greasewood and runs eight and a fourth miles to a stream [Raft River]. (Lord)

The plains which appeared to be three or four miles across proved to be sixteen and the stream [in the center] nothing but the grayish appearance of the air across so level a plain. (Swain)

We came to water in the west of the [Raft River] valley. [A] spring in a dirty slow, or say creek, (creek no. 13) [he numbered them for reference], five miles short of the ravine on the west side which I suppose the road will pass through [Cassia Gap]. (Middleton)

Three or four kinds of grass of excellent quality and appears like an extensive meadow. (Lord)

The river appears to run in three different channels around islands. (Sawyer)

I supposed it to be the head of Raft River as it runs north. Distance from the sink 15 miles. We are outside of the Great Basin now, the rim and divide is several miles SSE and the road seems to cross the head of the valley at a very low point of the two breaks in the mountains to the west [Cassia Gap]. Seen from camp at noon, the narrow right hand one must be the route. This is a beautiful valley and the ground rises gradually toward the SE for several miles. (Lord)

The stream is some 20 feet wide and two feet deep, muddy bottom and bad landings... We soon found that we were in quite a range of streams and ponds. We crossed them besides the one we had passed. The first was a beautiful clear stream 4 feet wide, not bad to cross, the second a small or pond overgrown with rushes, not bad, only muddy, but the third, or last was the worst little water we have had to cross. (Gorgas)

These mountain streams are filled with speckled trout. The stream is nearly covered in places by the long grass which is from the banks. (Parke)

Wood is sage and willows; grass is fair. (Burbank)

To the right, in a northwest direction, you can see the sharp peaks of towering mountains capped with eternal snow—hundreds of miles in the distance [Sawtooth Mountains], this is a magnificent view. The Raft River Mountains in our immediate vicinity [Albion Range] are lofty and grand and being capped with snow. (Wayman)

The road follows up a valley, crossing in 5 miles, several spring branches [high water channels of Cassia Creek]. (Marcy)

Here, opposite the ford [of Cassia Creek]...a trail comes down over the bluff which we suppose to be the road from Fort Hall. (Gorgas)

We saw in many parts of the [Raft River and Cassia Creek] valley wild wheat, oats, and barley growing luxuriantly, but many portions have no vegetation but wild sage. This does not appear to be from a lack of richness in the soil, as that is apparently good. the valley...is destitute of timber as are the surrounding mountains. We camped among large beds of prickly pears which were very annoying on account of their sharp thorns—vegetation is more forward in this valley [June 20, 1850] and the prickly pear is in bloom. I never saw the flower before; it is very beautiful, having the color of the rose. The flower is filled with yellow petals; the fruit is said to be excellent. There is one species much handsomer than that usually cultivated in our gardens east. Its shape is like the old fashioned straw beehive. (Sawyer)

Caught some trout here...abounds in fish and mussels. (Gorgas)

We crossed Raft River [Cassia Creek] which is about 20 feet wide and four feet deep. (Patterson)

And went up its valley about a mile. Just after we crossed Raft River [Cassia Creek] we came to the junction of the cutoff with the Fort Hall road. (Smith)

And camped...close to the road. We camped half a mile this side of [beyond?] where the Fort Hall road intersects this. (Thomasson)

Here ends the cutoff. (Bennett)

DIARISTS' DESCRIPTIONS OF SPECIAL FEATURES

ALONG

HUDSPETH'S CUTOFF

1. Old crater was so named by Fremont and recognized by most of the travellers thereafter. Other cones are evident in the region, but this is the most perfectly preserved one, and fits the geographic description of many of those who located it. Several diarists visited it, of which one was Swain who described it as follows, on August 15, 1849:

"On arriving at the crater I ascended its mound which is 40 feet above the level of the plain. Smooth outside surface which is covered with grass to its top. The east side is some six feet lower than the west, so that from the east a person has a fair view of the crater which is ten feet deep. The walls are circular and the strata of lava are disposed in angular circles like well-arranged masonry. I descended to the [illegible] valley of the crater and found it covered with soil in which sage and some grass were growing. The lower part of the wall is a mass of broken lava fallen from the upper part which stands as before stated and in regular layers. At one point I found the side of the orraface standing, untouched by time, just as it was when the eruption ceased, judging from the appearance. From this spot I collected some specimens of lava. The circumference of the crater at the edge of the mouth is sixty four paces. Judging from the appearance of the crater it must have been in a state of eruption in some time of modern date."

2. At this point along the route, Dr. Henry Austin, while walking apart from, and behind his wagon train, on August 18, 1849, wrote,

"Mountain after mountain in rapid succession, peak after peak towering almost into the clouds. To the west of where I am sitting is a lofty range of [illegible] looking mountains [clouded] in mist. The wagons are ahead, plowing up the dust and winding their way up hills and in through vallies in the most circuitous manner. I am sitting on a stone by the roadside writing my journal..."

At this place is a large outcropping of white quartzite, very pronounced, and the first large stone in place since the route left Bear River. From here he descended to Fish Creek.

3. At this location, Joseph Middleton wrote in his journal, on August 18, 1849,

"All the rock in this region, that lies within my approach, is fine-grained white freestone, semi-vitrified into a kind of flint..."

This ridge is composed of white quartzite and is very evident to the traveller. Middleton was very curious, apparently, and took the time to notice it; none of the other diarists did.

4. James Bennett, whose party passed here on August 5, 1850, wrote,

"At the outlet of this ravine, and within view of the creek to the left, is an immense pile of dark volcanic rock, thrown up full three hundred feet in height, in the crevices of which hundreds of ravens and magpies were perched, croaking and chattering at us as we passed."

This aviary is still present, and the birds still chatter and croak, but the rock is not volcanic but rather steeply dipping sedimentary rocks, but with many cracks and crevasses. There is no volcanic rock to speak of in the vicinity of the exit of the canyon.

5. Island Hill, so called by Joseph Middleton on August 18, 1849, is clearly described in his journal. He says,

"This is a large deep stream and appears to split, or divide, running round a hill in the middle of the valley, to [join] again on the west side of the hill and form a considerable falls with a goodly noise...Island hill is composed of half vertical rocks, the same as the hills on the north and the south. The porous baked rock here is made out of the fine grained freestone [illegible] of a dirty black and just like great scoria or fused cinders from a furnace and sounds like [illegible] when struck with a cane that has a head, that is, when you [strike] a slab of it that is large and broad and not overly thick. [illegible] freestone approaching flint still retains the appearance of the sand grains is seen in the other strata, and below the island is a fall in the river of perhaps ten feet and it is petrified by the lime or other substance held in solution in the river water which it possesses in this volcanic region....The volcanic porous rock is not so fractured as that at the chasms [near the junction of this road with the old Fort Hall road]...I am not sure but I think these falls may have been and old beaver dam petrified, but more hereafter. Sunday, August 19, 1849. Examined the falls of the river today at this place, for 3 hours. There are about 10 or 12 or more falls here, and the stream is split up into so many parts. The distance across them all through the willows is more than one fourth mile. The falls are constantly rising by the growth and decay of willows, with the petrification [illegible] which is going on and is inherent in the water. A fine [treatise] on the subject of petrification illustrated from what I saw here must be defended till a more convenient time. The hill is an island, but the stream going round the north side, although deep and gloomy, is more a lagoon than a running stream. [Illegible] rock and falls that are seen on this side, i.e., north, and I believe some water even at the lowest stand must run."

Island hill remains today, but the Portneuf River now flows only around the north side; the southern channel has been abandoned and is occupied in part by the present highway. The falls are dry, but are still to be seen just west of the hill.

6. A bull rush swamp is noted by many diarists, and its presence obliged the early travellers to detour to the south in order to ford the river; it was fed by many springs coming from the bench upon which the present town of Arimo rests. The name Marsh Creek appears early in history, and it is easy to see why. The swamp remains today, just to the west of the interstate highway which has been built along its eastern edge.

7. Garden Creek Gap. An obvious gash in the ridge can be seen from the east for a long distance. Of this, John Steele wrote, in 1850 on August 1,

"This forenoon by an inclined plain of eight miles we ascended a mountain where a few wind riven cedars cast their broken shade, and some large snowbanks relieved the monotony of the dull gray ridge. [He was travelling westward from Marsh Creek] Several miles north of the road there is a gap in the mountain, its perpendicular sides in places only a few rods apart. A clear brook ripples in the shadow, and emerging from the mountain, loses itself in a deep furrow, which courses away toward the east. I could see no reason why wagons could not pass through this gap and avoid the steep mountain road. Returning from the gap along the mountain summit, and descending by the immigrant road, in about three miles I found the company halted by a small creek [Hawkins Creek] for dinner."

8. Here, at this place, Joseph Middleton wrote,

"In a short distance we come to a very steep short hill [the bluff at the edge of Hawkins Creek valley] and then pass up the north side of a dry slew."

The slough remains to this day, occupied by a tiny stream coming from a spring. The presence of this slough helps to identify another of the curious Middleton's side trips.

9. Here, on August 20, 1849, Joseph Middleton continued to write,

"I ascended a high hill on the south side of the slew up which the road passes and I saw the small streams of the last valley [Hawkins Creek and its branch] turning to the east and entering the valley where we nooned yesterday [Marsh Creek], to pass into the slimy or muddy creek which I mentioned yesterday to run north and enter the Nith [his name for the Portneuf River]. This hill is covered to the top with splintery pieces of whitish and light blue argillaceous splintery [illegible] stone, which when time had [illegible] it I believe forms the fine soils over which we have been travelling for many miles and days."

Besides helping to locate the road geographically, this suggests that Middleton had studied some geology during his career, as he is correctly surmising the weathering processes in this area.

10. William H. Wagner, an engineer in Frederick Lander's party of Pacific Wagon Road builders, examined Hudspeth's Cutoff in 1859 and in his report states,

"After crossing the creek [Hawkins Creek] the road turns left 1 mile through a hollow enclosed by marble bluffs, to a low summit..."

At this place rock is exposed on either side of the canyon and is very pronounced. It is white quartzite, however, not marble. This confounding of the two types of rock is common among non-geologists as these two resemble one another superficially, being white.

11. On August 19, 1849, the Washington City Company, taking the cutoff while its leader, J. Goldsborough Bruff, went via Fort Hall, passed this way. Its diarist, Dr. Henry Austin, noted,

"Walked ahead of the train, rested on a large rock of fine white marble under some cedar trees. This growth presented to the eye at a distance the appearance of an old apple orchard."

Westward from Marsh Creek or the Portneuf River, there is no large exposure of rock for him to sit on except at the summit of the ridge between Marsh Creek and Hawkins Creek, and here, at the head of this canyon. That farther east is not white nor marble. This exposure is white, but is quartzite, easily confused with marble to the uninitiated.

12. Joseph Middleton passed here on August 20, 1849. He noted many small features which others did not notice. Among them is,

"About one mile west of [the summit?] there are two oblong hills standing insulated on the plain running north by east that are composed of freestone or perhaps [illegible] stone [illegible] into two heaps [illegible] porous cinders. I saw some of the disrupted strata of large rock on the highest top and broke two pieces as specimens of them."

Two small mounds of volcanic cinders capped by shattered and re-cemented volcanic breccia occur here at this place; they are being quarried for the cinders at the present time, and the disrupted strata at the top have been removed. Since this is the only occurrence of cinders along the entire route, this seems likely to be the location Middleton described.

13. Middleton again noted, on the same day,

"In the valley before I arrived at this hill [a hill he climbed and described, no. 14 of this report] I saw two large [illegible] of solid stone jutting out of the brow of the valley composed of coarse sand, gravel, and pebbles."

Dairy Creek, where it contacts the walls of the valley through which it is flowing, removes material and so exposes the nature of the rocks of the region which are otherwise covered by the soil and vegetation. Middleton's observation is correct.

14. Joseph Middleton's train camped near here on the night of August 20, 1849. Not one, apparently, to just sit around and rest, he wrote the next day,

"Last evening I ascended a high hill on the east side close to the creek where we camped all night...On the sides and on the top of the hill I saw enormous blocks of rock, some argillaceous, some sand-cooked in the highest degree, and the original streaks? in some of them twisted and contorted like the gnarly knob of arbor vitae or mahogany. Some-one in particular had a large oblong ball like cavity in it that I could have crept into and coiled up very easily. I suppose this had been a spot of dry sand--with something peculiar that it would not bake or fuse, and since exposure it has all mouldered out. All over the plain before I came to the hill top I saw fragments and [illegible] splintery of very beautiful and pure specimens of black bottle glass, some of which I also found on the top of the hill, which was 460 feet high...There is soda through all this region, also sand, and it is easy to account for this [illegible] of intense volcanic fire which has terrified all this region with a more intense heat than can be conceived of from [illegible] furnace within its narrow limits. On the northwest corner of this hill there is an elevated clump of disjointed rock, like an imposing watchtower; on approaching to them they possess a great deal of the columnar basaltic character; they are composed of sand and I think [illegible] baked into rock. I stood on the highest part of them."

Middleton's watchtower hill is easily recognized from the present road to-day, and his description is remarkable for one who must have been very weary after a long day's journey by wagon. The black bottle glass is of course obsidian, and it is everywhere present. He properly recognized the volcanic nature of the rocks on the hill, but he sure was no geologist; his interpretation of their origin is fascinating but incorrect. The rock is basalt at the top of the hill, not cooked sand.

15. The ascent up Sublette Canyon was apparently so unusual to the early travellers that most all of them said something about it. For instance, besides Middleton's account in the diary, Bennett noted, on August 9, 1850,

"...six miles of which is so closely hemmed in on either side as to render it impossible for a wagon to deviate from the beaten road a rod..."

Farnham, on July 24, 1849, while passing through, noted,

"...we travelled up a kind of kanyon just wide enough for a waggon & no more..."

15. continued. E. S. Ingalls noted on July 6, 1850, that,

"...It furnished us with an excellent road, although so narrow that but one wagon could pass for most of the way, the walls rising on either side hundreds of feet. The ascent is so gradual, so much so that the traveller hardly perceives any... It seemed that nature constructed this inclined plain expressly for the benefit of us poor mortals..."

Walter Pignat, apparently with a military viewpoint, noted, on June 11, 1858,

"...we found a beautiful road in a narrow valley winding its way up the mountain; this singular valley becomes more and more contracted until our wagon wheels rested on each side of the mountains with their lofty peaks towering thousands of feet above our heads. An army of 1000 men placed here on the sides of these mountains could effectively destroy an army of 10,000. One of the large rocks rolled down would effectively stop the advance and another in the rear would cut off all retreat and thus without any possible chance of escape would fall prey to the enemy who would be out of gunshot all the time."

Lorenzo Sawyer, later to be supreme court justice of California, observed during his passage in June 18, 1850,

"...we commenced the passage of a mountain. The road lay through a deep and narrow ravine, with very high and precipitous mountains on both sides. A great portion of the way through the ravine, the precipices on each side approached so near as to leave barely enough room for a single wagon track. The ascent through this ravine was gradual..."

William Swain, always very descriptive, passed the canyon on August 18, 1849, and wrote,

"...we commenced the ascent of a high ridge by a mountain pass such as we have not met with before. Its bottom is just wide enough for a wagon track and a footpath for the driver and often too narrow for the latter so that they have to walk on the side of the hills which rise on either side to a height of 1000 feet."

16. The descent from Sublett Canyon into Deep Creek valley is also an easily identified location in all of the diaries. Besides the description of the passage quoted from Sawyer, several other diarists took the time to pass along their impressions. Some of the more fascinating ones are those of

16. continued. Amos Batchelder, who, arriving at the summit on August 20, 1849, resigned himself by noting,

"...such mountains as the one just passed would be deemed impassable for wagons under any other circumstances, but here they are, and we are compelled to descend the fearful slope."

F. Castleman also made the descent, and on August 8, 1849, wrote,

"... after gaining the summit we had a steep descent for a mile and a half, passing between rocks in several places that almost rubbed the hubs of the wagons on both sides..."

Solomon Gorgas commented on June 24, 1850,

"... the descent here is for two miles very bad--abrupt and rocky, dangerous for teams--we locked both wheels and hung on by ropes behind and then with much exertion barely escaped from a regular plunge of the wagons onto the team..."

Jacob Hayden's train also had difficulties, as he notes, on July 14, 1852,

"It then follows down two miles between mountains but the road was so narrow that there was room for one wagon and it is beat down so deep it frequently hides the wagon and oxen. The road was so steep that we had to rough back every wheel."

No wonder it was worn so deep, roughing wheels is to fasten chains around them after they are locked, the chains being wrapped around the bottoms so that the drag is increased. Modern tire chains serve the same purpose but on turning wheels.

William Hoffman's party, on August 20, 1853, descended,

"...down a miserably steep and rough descent by hitching some of the oxen back of each wagon..."

E. S. Ingalls philosophically notes, on July 6, 1850, after praising Dame Nature for the splendid ascent,

"...that if Dame Nature was moved by any such kindly feelings towards us when she was engaged on this excellent [ascending] road, she must have got sadly miffed when she got it completed to the top of the mountain, for we had one of the most tremendous descents to make on the other side, that we have had on this journey. The descent was probably one thousand feet within the first mile, steeper than the roof of a house. It is said of the ancient Spartan that he commenced by lifting a kid, and by continuing to add weight, soon got so he could lift an ox. This is somewhat the case with us; when we commenced this journey, trifling hills were considered great obstacles, but now we lock our wheels and slide down a thousand feet, over rocks and through gullies with as much sang froid as a schoolboy would slide down a snow bank."

16. continued. Joseph Middleton leaves us no doubt as to where he was on the afternoon of August 21, 1849, when he writes,

"...we take a dive into another ravine in a direction a little to the west of south which will lead to god knows where. The descent down this gully or ravine, is the worst, I think, we have met with. It will hardly, however, scare an American California immigrant who has been trained to seeing so much bad road before he arrived here. It is very steep, narrow and crooked, and about 1 mile long. After getting a little down, the wagon is encased in the bed of a gully with close perpendicular banks, that in many places it appears impossible for it either to get off the road or to upset, for the close [walls?] hold it on each side..."

17. Twin Springs. Few diarists commented upon this region other than with the pleasure of coming to water after a dry stretch of at least 8 miles, and before 1850, of at least 22 miles. We are indebted to Joseph Middleton, therefore, whose descriptions of the spring basin make it abundantly clear that these springs were the ones which were so gratefully appreciated. He took the time to write on August 22, 1849,

"...there is a small stream passes through this valley to this [illegible] down a dirty, mossy bed...we camped on the farther side of the creek where I found several excellent and copious springs of pure water close to the creek...18 or 20 miles without one drop of water from creek no. 8 [Little Malad River] to this place. Our 10 gallon keg was filled at [the Little Malad River] but they gave it to the cattle whilst coming through [Sublett Canyon in the Blue Spring Hills]. In the evening [while camped in Deep Creek valley] I got a small cup full of water, what remained in a five gallon tin cannister...I drank of it [water from Twin Springs] and lay beside it for nearly two hours before the wagons came up, and I suffered more from thirst than I ever did before in my life... small pieces of the hard baked, dirty blue porous stone [basalt] is seen scattered throughout our valley, and dirty blue vitrified strata are seen on each side of the valley, projecting out of the brow or banks. It is a ...barren looking place and tramped red and the cattle dung tramped into powder all over this valley by so many campings....I saw three or more springs of fine water, two of which cannot be excelled."

18. Isaac Lord was perhaps the most curious of the diarists who travelled on the cutoff, and he took many detours to visit places of interest. One of these in Antelope Peak, in the Suellett Mountains. This is also called Quaking Aspen Peak on some of our modern maps, but perhaps it should really be called Mt. Lord, for on August 12, 1849, its first ascent is described.

"From camp this morning [at Twin Springs] I marked the highest peak bare of trees, smooth, and apparently gravelly, bearing west southwest and determined to get a view of the [Great Salt] lake from it....leaving the train and the road three miles on, I immediately began to ascend the mountain due west on a smooth rounded spur which descended from near the top. At first the ascent was gentle and I walked bravely and rapidly for more than two hours. It gradually became steeper and the scattered shrubs and green-sward gave place to gravelly clay and a very light covering of grass. Sharper and sharper was the ascent and slower and slower my progress. I persevered and never stopped or looked back, and at a broad 12 reached the summit. I was richly rewarded for all my present and previous tramps to get a good mountain view and the long tedious hours I have spent on this, for I began the ascent just after sunrise. The mountains are piled in heaps all around me. It is like getting on the highest stack of an Illinois farmer and overlooking all his stacks and ricks and cocks of hay. South 25 miles lies the Great Salt Lake in full view. One glance and I look again at my feet and down the mountain side and on a perfect nest of mountain peaks smooth as the one I stand upon, but much lower and gradually receding and lessening in height until they become part of the plain which seems to occupy half the space this side of the lake. Across the plain I see a constant succession of little whirlwinds like water spouts. They rise up suddenly and sweep along for a mile or more and vanish only to give place to another. Sometimes there are several at the same time. It is a barren desolate waste, no trees, no grass, no sign of vegetation after the first two or three peaks. All beyond looks utterly desolate, and all has a dreamy eruptive silence. I do not hear a sound. But the lake! There it lies, white as the driven snow, with now a dark, now a green, now a blue spot in the center stretching away towards the southeast directly against a high black looking island. Beyond the white expanse rise high black barren looking mountains. The white expanse is pure salt. The dark streak is the water, which is blue, green, or black, as it is more or less ruffled by the wind. It is a sublime but melancholy sight after all. There is not a dime's worth of anything here if we may except the salt..."

19. The pass through Sublett Canyon, from just west of Twin Springs to where it opens into the Raft River valley, is, for the most part, bounded by rather smooth slopes, but in the few places where the rocks project, a few of the diarists made a note. At this particular place, Solomon Gorgas wrote, on June 26, 1850,

"Started at 5:15 O'Clock this morning and wound our way down the north side of the stream upon which we camped [Sublett Creek], and in about two miles drive passed a range of very abrupt and rocky bluffs to our right of the roadway about half a mile long. We passed into a fine broad valley, the mountains to the west in the direction of our journey [Cottarel Range and Albion Range behind them] was clearly perceptible, distant some 18 miles to the base---three miles from the rocky bluff on our right...left the stream..."

This rocky bluff is a basalt flow which has been incised by the creek at this point and exposed. It is at this point that the creek leaves the confines of the ravine in the Sublett Mountains and widens its valley somewhat by eroding into the basalt.

20. The sink of Sublett Creek. Some diarists mention it and others do not, and those who mention it indicate that they cross the creek at different distances from the sink. This is of course due to the season of the year, and the year itself. Some crossed Sublett Creek at the sink and others crossed above it; it no longer is present. Irrigation ditches now steal the water from the creek and divert it for use before it can sink. Even the creek bed is gone now, having been filled in by the farming in the area.
21. The junction of Hudspeth's Cutoff with the original California trail occurs here. Almost all of the diarists mention it, and only a few have taken the trouble to record distances to it. This historic cross road is now lost in an irrigated field, but the two roads can be traced to within about half a mile of each other.

REFERENCES CITED

- Austin, Henry. Diary. Original manuscript in Bancroft Library.
Cutoff dates August 18-24, 1849
- Badman, Philip. Diary. Original in Yale University Library.
Cutoff dates July 30-August 6, 1849
- Banks, John E. Diary. Published in The Buckeye rovers in the
gold rush, edited by H. L. Scamehorn. Athens, Ohio Univ.
Press, 1965. Cutoff pages 49-54
- Batchelder, Amos. Diary. Original in Bancroft Library. Cutoff
dates August 16-22, 1849
- Bennett, James. Overland journey to California...New Harmony, Indiana,
Times Print., 1906. Cutoff pages 31-35
- Brown, John E. Memoirs of an American gold seeker. Jour. American
History, vol. 2, p. 129-154, 1908. Cutoff pages 148-149
- Burbank, A. R. Diary. Photocopy in Bancroft Library. Cutoff dates
July 26-August 2, 1849
- Carpenter, Helen M. Diary. Typescript in California State Library.
Cutoff dates August 10-17, 1856
- Castleman, F. Diary. Original in Bancroft Library. Cutoff dates
August 4-10, 1849
- Child, Andrew. Overland route to California... Milwaukee, Daily
Sentinel Steam Press, 1852; reprinted, Los Angeles, N. A. Kovach,
1946. Cutoff pages 36-42
- Dalton, John E. Diary. Typescript in Wisconsin State History Library.
Cutoff dates July 17-24, 1852
- Dutton, W. P. Across the plains in 1850. Annals of Iowa, vol. ?,
p. ?, date ?, Cutoff pages 469-470
- Farnham, Elijah B. From Ohio to California in 1849; the gold rush
journal of Elijah Bryan Farnham, edited by M. J. Mattes and E. J.
Kirk, part 2. Indiana Magazine of History, vol. 46, p. 297-318,
403-420, 1950. Cutoff pages 408-410
- Gorgas, Solomon A. Diary. Original in Huntington Library. Cutoff
dates June 22-26, 1850
- Granville County Ohio Company. Diary. Original in Yale University
Library. Cutoff dates July 20-27, 1849

- Hayden, Jacob S. Journal of a trip across the plains to California in 1852. Typescript in Library of Congress. Cutoff dates July 11-19, 1852
- Hickman, Richard O. An overland journey to California in 1852; the journal of Richard Owen Hickman, edited by M. C. White. Sources of northwest history, no. 6, Montana State University. Reprinted from The Frontier, vol. 9, no. 3, 1929. Cutoff pages 14-15
- Hoffman, William. An accurate observer, by A. S. Taylor and W. M. McKinney. Idaho Yesterdays, vol. 8, no. 2, p. 20-25, 1964. Cutoff pages 22-25
- Howell, Elijah P. Diary. Typescript in Bancroft Library. Cutoff dates July 23-30, 1849
- Ingalls, E. S. Journal of a trip to California by the overland route across the plains in 1850-51. Waukegan, Illinois, Tobey and Co., 1852. Cutoff dates July 4-9, 1850
- Lewis, Elisha B. Diary. Original in Wisconsin State Historical Society Library. Cutoff dates July 27-August 4, 1849
- Lord, Isaac S. P. Diary. Original in Huntington Library. Cutoff dates August 7-16, 1849
- Marcy, Randolph B. The prairie traveller.... New York, Harper and Bros., 1859. Cutoff pages 280-282
- McCoy, Samuel Finley. Pioneering on the plains; the overland trip to California [1849]. Kaukauna, Wisconsin, privately printed, 1924. Cutoff dates August 7-14, 1849
- Middleton, Joseph. Diary. Original in Yale University Library. Cutoff dates August 18-24, 1849
- Mitchell, Lyman. Diary. Original in Yale University Library. Cutoff dates July 29-August 4, 1849
- Parke, Charles R. Diary. Original in Huntington Library. Cutoff dates July 19-25, 1849
- Fatterson, E. H. N. My impressions of the overland route to California. Oquawka Illinois Spectator, October 2, 1850. Cutoff dates June 13-19, 1850
- Perkins, Elisha D. Diary. Original in Huntington Library. Cutoff dates August 9-14, 1849

- Pigman, Walter Griffith. The journal of Walter Griffith Pigman [1858]. New Mexico, Missouri, Walter G. Staley, 1942. Cutoff pages 21-23
- Sawyer, Lorenzo. Way sketches...edited by E. Eberstadt. New York, E. Eberstadt, 1926. Cutoff pages 60-66
- Sedgely, Joseph. Overland to California in 1849. Oakland, California, Butler and Bowman, 1877. Cutoff pages 41-46
- Shepherd, J. S. Journal of travel across the plains to California and guide to the future emigrant. [Racine, Wisconsin], Mrs. Rebecca Shepherd, Commercial Advertiser Print, 1851. Cutoff pages 19-21
- Smith, C. W. Journal of a trip to California...1850, edited by R. W. G. Vail. New York, Theicadmus Book Shop, n. d. Cutoff pages 62-66
- Steck, Amos. Diary. Typescript in Colorado State Historical Society Library. Cutoff dates July 28-August 6, 1849
- Steele, John. The travellers companion...[guidebook]. Galena, Illinois, H. H. Houghton, 1854. Cutoff pages 31-35
- Steele, John. Across the plains in 1850, edited by J. Schafer. Chicago, Illinois, printed for the Caxton Club, 1930. Cutoff pages 130-139
- Swain, William. Diary. Original in Yale University Library. Cutoff dates August 15-25, 1849
- Thomasson, A. H. Diary. Typescript at California State Library. Cutoff dates June 21-27, 1850
- Turnbull, Thomas. T. Turnbull's travels from the United States across the plains to California, edited by F. L. Paxson. Wisconsin State Historical Society, Proceedings of the 61st Annual Meeting, 1914. Cutoff pages 185-188
- Wagner, William H. Rough notes of travel of advance party, Fort Kearny-South Pass and Honey Lake Wagon Road. Original in U. S. National Archives, 1859. Cutoff dates June 17-24, 1859
- Wayman, John H. Diary. Photocopy in Bancroft Library. Cutoff dates July 5-11, 1852
- Webster, Kimball. The goldseekers of '49... Manchester, New Hampshire, Standard Book Company, 1917. Cutoff pages 72-75
- Wilkins, James F. An artist on the overland trail. The 1849 diary and sketches of James F. Wilkins, by John F. McDermott. San Marino, California, Huntington Library, 1960. Cutoff pages 61-63